

CLAIMS

sub. a2

1 1. A magnetic/metallic security device for use with an
2 item to provide multiple security features, said
3 magnetic/metallic security device comprising:
4 a carrier substrate;
5 a metallic layer disposed on at least a portion of said
6 carrier substrate, for providing metallic security features; and
7 a magnetic layer disposed on and in substantially identical
8 registration with said metallic layer, for providing magnetic
9 security features, wherein said metallic layer and said magnetic
10 layer together form visually identifiable graphic indicia on said
11 at least a portion of said carrier substrate.

1 2. The magnetic/metallic security device of claim 1,
2 wherein said magnetic layer includes a chemical resist.

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1 3. The magnetic/metallic security device of claim 1,
2 wherein said visually identifiable graphic indicia is formed as
3 magnetic characters readable by MICR detectors..

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1 4. The magnetic/metallic security device of claim 1,
2 wherein said magnetic layer includes a hard magnetic substance
3 capable of being magnetized for recording data on said magnetic
4 layer.

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3 substrate, wherein said conductive regions are separated by non-
4 conductive regions and have at least two different predetermined
5 lengths forming a predetermined pattern for representing encoded
6 data, and wherein said predetermined lengths of said conductive
7 regions are detectable to read said predetermined pattern and
8 decode said data.

1 ¹²
~~13~~. The magnetic/metallic security device of claim ¹¹~~12~~,
2 wherein said conductive regions include first and second
3 predetermined lengths representing binary integers, and wherein
4 said predetermined pattern of said first and second lengths of
5 said conductive regions encodes said data in a binary coded
6 format.

1 ¹³
~~14~~. The magnetic/metallic security device of claim ¹¹~~12~~,
2 wherein said data encoded by said predetermined pattern of said
3 conductive regions is a verification code.

1 ¹⁴
~~15~~. The magnetic/metallic security device of claim 1,
2 wherein said visually identifiable graphic indicia is formed
3 positively on said carrier substrate by said magnetic layer and
4 said metallic layer underlying said magnetic layer.

1 ⁵
~~16~~. The magnetic/metallic security device of claim 1,
2 wherein said visually identifiable indicia is formed negatively
3 on said carrier substrate by said magnetic layer and said

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1 ²³
25. A metallic security device for use with an item, said
2 metallic security device comprising:
3 a carrier substrate; and
4 a plurality of conductive regions disposed on said carrier
5 substrate, wherein said conductive regions are separated by non-
6 conductive regions and have at least two different predetermined
7 lengths forming a predetermined pattern for representing encoded
8 data, and wherein said predetermined lengths of said conductive
9 regions are detectable to read said predetermined pattern and
10 decode said data.

1 ²⁴
26. The metallic security device of claim ²³25, wherein said
2 conductive regions include first and second predetermined lengths
3 representing binary integers, and wherein said predetermined
4 pattern of said first and second lengths of said conductive
5 regions encodes said data in a binary coded format.

1 27. The metallic security device of claim 25, wherein said
2 conductive regions are formed as graphic indicia and said non-
3 conductive regions are formed as breaks between said graphic
4 indicia.

1 ²⁵
28. The metallic security device of claim ²³25, wherein said
2 non-conductive regions are formed as graphic indicia and said
3 conductive regions are formed around said graphic indicia.

1 ³⁴
38. The method of claim ³²36, wherein said/magnetic pigments
2 include soft magnetic pigments having at least one predetermined
3 magnetic characteristic.

1 ³⁵
39. The method of claim ³¹35 wherein the step of applying
2 said magnetic chemical resist includes printing said ~~graphic~~ ^{Pattern}
3 ~~indicia~~ using said magnetic chemical resist. ¹

1 ³⁶
40. The method of claim ³¹35 further including:
2 applying an additional layer over said ~~graphical~~ ^{Pattern} ~~indicia~~
3 formed by said magnetic chemical resist and said portion of said
4 metallic layer underlying said magnetic chemical resist. ¹

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1 41. A method of authenticating a magnetic/metallic security
2 device comprising the steps of:
3 writing data to a magnetic layer disposed on at least a
4 portion of a carrier substrate;
5 reading magnetic data from said magnetic layer; and
6 comparing said read magnetic data with expected magnetic
7 data.

1 42. The method of claim 41 wherein said expected magnetic
2 data includes predetermined magnetic data.

1 43. The method of claim 42 wherein said predetermined
2 magnetic data includes analog data.

1 44. The method of claim 42 wherein said predetermined
2 magnetic data includes digital data.

1 45. The method of claim 41 wherein said magnetic data
2 includes a magnetic level.

1 39 46. The method of claim 38 wherein said magnetic level is
2 selected from the group consisting of a high magnetic level, a
3 low magnetic level and a medium magnetic level.

1 23. The magnetic security device of claim 20, wherein said
2 magnetic regions having said different predetermined magnetic
3 characteristics include at least first and second types of soft
4 magnetic pigments capable of holding first and second
5 predetermined levels of magnetism.

1 ²²24. The magnetic security device of claim ¹⁹20, wherein said
2 magnetic regions are formed as graphic indicia on said carrier
3 substrate.

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1 20. A magnetic security device for use with an item, said

2 magnetic security device comprising:

3 a carrier substrate; and

4 a plurality of magnetic regions disposed on said carrier
5 substrate, wherein said plurality of magnetic regions have
6 different predetermined magnetic characteristics, wherein said
7 plurality of magnetic regions having different predetermined
8 magnetic characteristics are arranged in a predetermined pattern
9 representing data encoded by said magnetic regions such that said
10 first and second predetermined characteristics are detectable to
11 read said predetermined pattern and decode said data.

1 21. The magnetic security device of claim 20, wherein said
2 different predetermined characteristics include at least first
3 and second predetermined magnetic characteristics representing
4 binary integers, and wherein said predetermined pattern of said
5 magnetic regions having said first and second predetermined
6 magnetic characteristics represents data in a binary coded
7 format.

1 22. The magnetic security device of claim 20, wherein said
2 magnetic regions having said different predetermined magnetic
3 characteristics include at least first and second types of soft
4 magnetic pigments having first and second predetermined magnetic
5 decay rates.

47. The method of claim 45 wherein said expected data includes the rate of decay of said magnetic level.

1 49. A method of claim 41 further including before the step
2 of writing data to said magnetic layer the step of determining
3 the presence of a metallic layer on said magnetic/metallic
4 security device.

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